

At page 5, lines 3, 4, 6, 7 and 8, please insert the phrase --or non-metallic-- after the word “metallic” and before the word “alkoxide”.

These amendments to the Specification introduce no new matter because they are merely corrected generic descriptions describing examples that have been given at page 4, lines 7 and 8 of the application as filed.

IN THE CLAIMS

Please amend the claims as follows:

An appendix of this response contains the versions of the claims marked to show the changes made. This appendix is called “Version With Markings To Show Changes Made.”

These amendments introduce no new matter into the claims. The addition to Claim 1 beginning at line 9 and the addition to Claim 5 beginning at line 10 are supported in the Specification as filed, page 4, lines 4-7.

1. (Amended) A positive active material for rechargeable lithium batteries, the positive active material comprising:

an active material component processed from a manganese-based compound, the manganese-based compound being selected from the group consisting of Li_xMnO_2 , Li_xMnF_2 , Li_xMnS_2 , $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_2$, $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_{2-z}\text{F}_z$, $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_{2-z}\text{S}_z$, $\text{Li}_x\text{Mn}_2\text{O}_4$, $\text{Li}_x\text{Mn}_2\text{F}_4$, $\text{Li}_x\text{Mn}_2\text{S}_4$, $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_4$, $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_{4-z}\text{F}_z$, and $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_{4-z}\text{S}_z$, where $0 < x < 1.5$, $0.05 \leq y \leq 0.3$, $z \leq 1.0$ and M is selected from the group consisting of Al, Co, Cr, Mg, Fe and La;

and

a metallic oxide or nonmetallic oxide coated on the active material component, the metallic oxide being selected from the group consisting of Mg, Al, Co, K, Na, Ca, Ti and Sr, and the nonmetallic oxide comprising Si.

2. (Amended) The positive active material of claim 1 wherein the metallic oxide has a metal selected from the group consisting of Mg, Ti and Al, and the nonmetallic oxide has a nonmetal comprising Si.

3. (Amended) The positive active material of claim 1 wherein the oxide has a thickness range of 1–1000nm.

4. (Amended) The positive active material of claim 1 wherein the quantity of metal or nonmetal content is a range of 1 to 10 weight percent of the oxide.

5. (Amended) A method of preparing a positive active material for rechargeable lithium batteries, the method comprising the steps of:

obtaining a powder from a source material, the source material being selected from the group consisting of Li_xMnO_2 , Li_xMnF_2 , Li_xMnS_2 , $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_2$, $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_{2-z}\text{F}_z$, $\text{Li}_x\text{Mn}_{1-y}\text{M}_y\text{O}_{2-z}\text{S}_z$, $\text{Li}_x\text{Mn}_2\text{O}_4$, $\text{Li}_x\text{Mn}_2\text{F}_4$, $\text{Li}_x\text{Mn}_2\text{S}_4$, $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_4$, $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_{4-z}\text{F}_z$, and $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_{4-z}\text{S}_z$, where $0 < x < 1.5$, $0.05 \leq y \leq 0.3$, $z \leq 1.0$ and M is selected from the group consisting of Al, Co, Cr, Mg, Fe and La; and

coating the powder with a metallic alkoxide solution or a nonmetallic alkoxide solution to make an alkoxide-coated powder, the metallic alkoxide solution being selected from the group

consisting of Mg-alkoxide, Al-alkoxide, Co-alkoxide, K-alkoxide, Na-alkoxide, Ca-alkoxide, Ti-alkoxide and Sr-alkoxide, and the nonmetallic alkoxide solution comprising Si-alkoxide; and

heat-treating the alkoxide-coated powder such that the alkoxide-coated powder is changed into an oxide-coated powder.

6. (Amended) The method of claim 5 wherein the alkoxide solution is selected from the group consisting of Si-alkoxide, Mg-alkoxide, Ti-alkoxide and Al-alkoxide.

7. (Amended) The method of claim 5 wherein the alkoxide solution contains 1 to 50 weight percent of the metal or the nonmetal.

8. (Amended) The method of claim 5 wherein the heat-treating step is performed at a temperature range of 200 to 1000°C for 1 to 20 hours.